

Appendix A: Clean Version of the Pending Claims

12. An isolated nucleic acid, wherein the nucleic acid encodes a protein comprising one of the following amino acid sequences:

ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK 170  
 (SEQ ID NO:52) ;

MAQLCGL RRSRAFLALL GSLLLSGVLA -1  
 ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLRVARRN 200  
 QERALRTVWS SGDDKEQLVK NTYVL 225  
 (SEQ ID NO:49) ;

ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLRVARRN 200  
 QERALRTVWS SGDDKEQLVK NTYVL 225  
 (SEQ ID NO:71) ;

AGSFLAWL GSLLLSGVLA -1  
 ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK VVVLAGAVS 179  
 (SEQ ID NO:2) ;

MLR AEADGVSRLL GSLLLSGVLA -1  
 ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLRVARRN 200  
 QERALRTVWS SGDDKEQLVK NTYVL 225  
 (SEQ ID NO:45) ;

MAQLCGL RRSRAFLALL GSLLSGVLA -1  
 ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN 200  
 QERALRTVWS FGD 213  
 (SEQ ID NO:47) ;

ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQQ ENPPLPLGSK VVVLAGLFVM VLILFLGASM VYLIRVARRN 200  
 QERALRTVWS FGD 213  
 (SEQ ID NO:70) ;

IHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATV 64  
 (SEQ ID NO:4) ;

CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK C 61  
 (SEQ ID NO:5) ;

YEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQ 159  
 (SEQ ID NO:6) ;

CTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRC 156  
 (SEQ ID NO:7) ;

IHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRCFRQ 159  
 (SEQ ID NO:3) ;

CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
 YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
 NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
 ACMLRC 156  
 (SEQ ID NO:50) ;

ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DSEDHSSDMF 100  
NYEEYCTANA VTGPCRASFP RWYFDVERNS CNNFIYGGCR GNKNSYRSEE 150  
ACMLRCFRQQ ENPPLPLGSK VVVLAGAVS 179  
(SEQ ID NO:1); and

ADRERSIHDF CLVSKVVGRC RASMPRWYN VTDGSCQLFV YGGCDGNSNN 50  
YLTKEECLKK CATVTENATG DLATSRNAAD SSVPSAPRRQ DS 92  
(SEQ ID NO:8).

13. The nucleic acid of claim 12, wherein the nucleic acid comprises one of the following nucleic acid sequences: SEQ ID NO:9, 32, 44, 46, 48, 51, and 75.

14. A self-replicating protein expression vector, comprising the nucleic acid of claim 12.

15. The expression vector of claim 14, wherein the expression vector is capable of expressing a protein that is: (a) glycosylated; or (b) contains at least one intra-chain cysteine-cysteine disulfide bond; or (c) is both glycosylated and contains at least one intra-chain cysteine-cysteine disulfide bond.

16. A method of preparing a protein encoded by the nucleic acid of claim 12, comprising:

(a) inserting the nucleic acid into an appropriate protein expression vector by use of recombinant DNA technology, to create a bikunin expression vector; and  
(b) subjecting the bikunin expression vector to an appropriate protein expression system.

17. The method of claim 16, wherein the protein is: (a) glycosylated; (b) contains at least one intra-chain cysteine-cysteine disulfide bond; or (c) is both glycosylated and contains at least one intra-chain cysteine-cysteine disulfide bond.